CLAIMS

What is claimed is:

1.   A data service system, comprising:

a server system that includes a request processor that schedules external requests to be serviced by the server system based on classification contained in a tag of each of the requests;

an application system coupled to the server system, further comprising

an application engine that performs a transaction requested by an external request and provides response to the request to the server system;

a business rule engine that stores business rules regarding classification of various transactions, and uses the business rules to analyze the response to the request;

a tag generator that generates the tag based on the analysis of the business rule engine, wherein the tag is attached to the response by the server system and sent to a requesting client that issued the external request such that the tag is attached to subsequent requests from the requesting client to the data service system.

2.   The data service system of claim 1, wherein the tag generator causes the business rule engine to analyze the response with the business rules stored in the business rule engine to determine classification of the transaction such that subsequent requests that are part of the same transaction do not need to be classified again.

3.   The data service system of claim 2, wherein the tag generator causes the business rule engine to re-applies the business rules to responses for the subsequent requests to determine if reclassification is needed for the subsequent requests.

4.   The data service system of claim 3, wherein the tag is updated if the tag generator determines that reclassification is needed.

5.   The data service system of claim 1, wherein the server system attaches the tag into the response by placing the tag (1) in a cookie, (2) in the body of the response message, or (3) in a URL of the response.

6.   The data service system of claim 1, wherein when the request processor receives a request, it parses the request to determine if the request is for an existing transaction or for a new transaction.

7.   The data service system of claim 1, wherein the server system is a TCP/IP-based server application system.

8.   The data service system of claim 7, wherein the server system is one of a web server system, an e-mail server system, a news server system, an e-commerce server system, a proxy server system, a domain name server system, and a local service server system.

9.   In a data service system having an application system coupled to a

server system, a method of classifying access requests, comprising:

storing business rules regarding classification of various transactions in a business rule engine;

receiving an access request in the application system from the server system, wherein the access request is requesting the application system to perform a transaction and to generate a response for the request;

using the business rules to analyze the response to obtain the classification information of the transaction;

generating a tag containing the classification information;

sending the tag to a requesting client that issued the request such that the tag is attached to subsequent requests to the data service system for the same transaction;
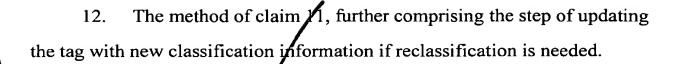
scheduling requests to be serviced by the server system based on the classification information contained in the tag of each of the requests.

10. The method of claim 9, wherein the step of scheduling requests further comprises

parsing each of the requests to determine if the request is for an existing transaction or for a new transaction;

if the request is for a new transaction, assigning a default tag to the request.

11. The method of claim 9, further comprising the step of re-applying the business rules to responses of subsequent requests of an existing transaction to determine if reclassification is needed for the subsequent requests.

12. The method of claim 11, further comprising the step of updating the tag with new classification information if reclassification is needed.

13. The method of claim 9, wherein the step of sending the tag to a requesting client further comprises the step of attaching the tag into the response by placing the tag (1) in a cookie, (2) in the body of the response message, or (3) in a URL of the response.

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